IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: **Childress et al.**	§	
	§	Group Art Unit: **2444**
Serial No.: **10/753,817**	§	
	§	Examiner: **Anwari, Maceeh**
Filed: **January 8, 2004**	§	
	§	Confirmation No.: **6768**
For: **Method and Apparatus for Supporting Transactions**	§	
	§	

35525

PATENT TRADEMARK OFFICE
CUSTOMER NUMBER

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF (37 C.F.R. 41.37)

This brief is in furtherance of the Notice of Reinstatement of Appeal, filed in this case on February 10, 2009.

No fee is believed to be required for filing this Appeal Brief, as the appeal has been re-instated pursuant to MPEP 1204.01. No additional fees are believed to be required. If, however, any fees are required, I authorize the Commissioner to charge these fees which may be required to IBM Corporation Deposit Account No. 09-0447. No extension of time is believed to be necessary. If, however, an extension of time is required, the extension is requested, and I authorize the Commissioner to charge any fees for this extension to IBM Corporation Deposit Account No. 09-0447.

REAL PARTY IN INTEREST

The real party in interest in this appeal is the following party: International Business Machines Corporation of Armonk, New York.

RELATED APPEALS AND INTERFERENCES

This appeal has no related proceedings or interferences.

STATUS OF CLAIMS

A. TOTAL NUMBER OF CLAIMS IN APPLICATION

The claims in the application are: 1-24

B. STATUS OF ALL THE CLAIMS IN APPLICATION

Claims canceled: 5, 6, 9, 15 and 16

Claims withdrawn from consideration but not canceled: None

Claims pending: 1-4, 7, 8, 10-14 and 17-24

Claims allowed: None

Claims rejected: 1-4, 7, 8, 10-14 and 21-24

Claims objected to: None

C. CLAIMS ON APPEAL

The claims on appeal are: 1-4, 7, 8, 10-14 and 17-24

STATUS OF AMENDMENTS

This appeal is a reinstated appeal being filed pursuant to MPEP 1204.01, and no amendments have been filed in response to the Final Office Action dated November 14, 2008. Amendments have been filed in response to the Office Action dated July 14, 2008, which re-opened prosecution of this case when it was under a previous appeal pursuant to an Appeal Brief filed by Appellants on February 13, 2008.

SUMMARY OF CLAIMED SUBJECT MATTER

Businesses and other organizations employ network data processing systems to conduct business and other transactions. These networks may be as small as a single LAN or may encompass many networks, including the Internet. Enterprise networking involves using a network infrastructure in a large enterprise or business organization with multiple computer systems and networks. These types of infrastructures are typically extraordinarily complex. An enormous amount of effort goes into planning and managing the integration of different disparate networks and systems. Also, planning for additional interfaces as needs and demands change also occurs.

In managing an enterprise system, these systems often include a number of servers that are assigned to provide different services. Management of these servers is an important function of ensuring that services are provided when needed. Managing the allocation of resources for providing services to process requests is an important and complex task. As part of a process to identify the capability and usage of resources, identifying transactions processed by nodes, such as servers, is important for use in ensuring that a perceived capability matches the actual usage for those nodes. For example, a set of servers may be provisioned to handle requests for a Website set up to support an online business that provides goods or services. The servers also may be set up to provide access to data, such as medical records, tax information, or regulations. The resources needed vary depending on the usage and demand from clients. In provisioning resources, it is important to identify the usage of the resources. If the usage increases, capacity may be added to meet the increasing demand. In some cases, the addition of servers may be unnecessary because one or more current servers may be underutilized while others may be strained to the point of failure or are unable to meet expected service levels. A mismatch in the capabilities is often identified by the occurrence of a failure and subsequent analysis of the system. These failures typically occur when currently used load balancing techniques are unable to adequately monitor and maintain the capabilities for servicing requests.

When an application is simple and does not require the state to persist over multiple requests from a user, the normal round robin or other such load balancing techniques are sufficient to maintain capabilities for servicing requests. In the case where the application is more complex and requires state information to persist across multiple requests, the presently

available load balancing techniques are unable to sufficiently monitor and manage resources for servicing requests. In the case where state information is persisted, the user's session is required to be associated with a particular server providing the information. This situation is generally referred to as "sticky load balancing". In this case it is normal for a single server to become overloaded due to the stickiness of the transaction. This problem increases when the situation changes from the user being a human using a browser to a computer using Web services. The main reason for having to maintain state information in these examples is the need to access legacy systems.

Generally provided by the present pending claims is a technique for monitoring and identifying transactions handled by nodes in a networked data processing system, in order to provide selective load-balancing which is non-invasive in that the node does not have to respond to direct requests for the transaction information. This non-invasive monitoring is particularly useful when a given server has turned off or otherwise disabled any ability to monitor the server, such as when the server is operating during a critical time period or is otherwise heavily loaded, and therefore cannot spare the additional computing resources/overhead that would otherwise be required to provide monitoring/status information by such server.

A. CLAIM 1 - INDEPENDENT

The subject matter of Claim 1 is directed to a method in a data processing system for monitoring transactions for a set of known nodes in a network data processing system (Specification page 12, lines 15-17). Cache data from a router in the data processing system is received, where the cache data includes an identification of the set of known nodes sending data packets for transactions onto the network data processing system (Specification page 17, lines 25-26; page 14, lines 14-24; Figure 8, block 800; Figure 5, all blocks). The transactions handled by each node in the set of known nodes are identified using the identification of the set of nodes included in the cache data received from the router, to form identified transactions (Specification page 17, lines 28-29; Figure 8, block 804). The identified transactions are analyzed, and in response to analyzing the identified transactions, a load balancing process is selectively initiated for at least one of the nodes in the set of known nodes to mitigate transaction overload at the at

least one of the nodes (Specification page 18, line 4 – page 19, line 26; Figure 8, block 808; Figure 9, all blocks).

B. CLAIM 10 - INDEPENDENT

The subject matter of Claim 10 is directed to a data processing system for monitoring transactions for a set of known nodes in a network data processing system (Specification page 12, lines 15-17), the data processing system comprises a bus system, a communications unit connected to the bus system, a memory connected to the bus system, and a processing unit connected to the bus system (Specification page 10, line 26 – page 12, line 14; element 300 of Figure 3). The processing unit executes a set of instructions in the memory (i) to receive cache data from a router in the data processing system, where the cache data includes an identification of the set of known nodes sending data packets for transactions onto the network data processing system (Specification page 17, lines 25-26; page 14, lines 14-24; Figure 8, block 800; Figure 5, all blocks), (ii) identify the transactions handled by each node in the set of known nodes using the identification of the set of nodes included in the cache data received from the router (Specification page 17, lines 28-29; Figure 8, block 804); (iii) analyze the identified transactions (Specification page 18, line 4 – page 19, line 3; Figure 8, block 808); and (iv) in response to the analyzing the identified transactions, selectively initiate a load balancing process for at least one of the nodes in the set of known nodes to mitigate transaction overload at the at least one of the nodes (Specification page 19, lines 4-26; Figure 9, all blocks).

C. CLAIM 11 - INDEPENDENT

The subject matter of Claim 11 is directed to a data processing system, including a data processor, for monitoring transactions for a set of known nodes in a network data processing system (Specification page 12, lines 15-17). The data processing system comprises receiving means for receiving cache data from a router in the data processing system, where the cache data includes an identification of the set of known nodes sending data packets for transactions onto the network data processing system (Specification page 17, lines 25-26; page 14, lines 14-24; Figure 8, block 800; Figure 5, all blocks); identifying means for identifying the transactions handled by each node in the set of known nodes using the identification of the set of nodes

included in the cache data received from the router, to form identified transactions (Specification page 17, lines 28-29; Figure 8, block 804); analyzing means for analyzing the identified transactions (Specification page 18, line 4 – page 19, line 3; Figure 8, block 808); and initiating means for selectively initiating, responsive to the analyzing means for analyzing the identified transactions, a load balancing process for at least one of the nodes in the set of known nodes to mitigate transaction overload at the at least one of the nodes (Specification page 19, lines 4-26; Figure 9, all blocks).

The equivalent structure for each of the receiving means, identifying means, analyzing means and initiating means is provided by element 300 of Figure 3, as described in the Specification at page 10, line 26 – page 12, line 14.

D. CLAIM 18 - INDEPENDENT

The subject matter of Claim 18 is directed to a computer readable medium encoded with a computer program product that is operable in a data processing system for monitoring transactions for a set of known nodes in a network data processing system (Specification page 12, lines 15-17; page 20, lines 13-28). The computer program product comprises first instructions for receiving cache data from a router in the data processing system, wherein the cache data includes an identification of the set of known nodes sending data packets for transactions onto the network data processing system (Specification page 17, lines 25-26; page 14, lines 14-24; Figure 8, block 800; Figure 5, all blocks); second instructions for identifying the transactions handled by each node in the set of known nodes using the identification of the set of nodes included in the cache data received from the router, to form identified transactions (Specification page 17, lines 28-29; Figure 8, block 804); third instructions for analyzing the identified transactions (Specification page 18, line 4 – page 19, line 3; Figure 8, block 808); and fourth instructions for selectively initiating, in response to the third instructions for analyzing the identified transactions, a load balancing process for at least one of the nodes in the set of known nodes to mitigate transaction overload at the at least one of the nodes (Specification page 19, lines 4-26; Figure 9, all blocks).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection to review on appeal are as follows:

A. GROUND OF REJECTION 1

The rejection of Claims 22-24 under 35 U.S.C. § 112, 2nd paragraph;

B. GROUND OF REJECTION 2

The rejection of Claims 18-20 under 35 U.S.C. § 101 as being directed towards non-statutory subject matter; and

C. GROUND OF REJECTION 3

The rejection of Claims 1-4, 7, 8, 10-14 and 21-24 under 35 U.S.C. § 103 as being unpatentable over Ogielski et al. (U.S. Publication No. 2004/0221296) and further in view of Guha (U.S. Publication No. 2002/0194324).

ARGUMENT

A. GROUND OF REJECTION 1 (Claims 22-24)

Claims 22-24 stand rejected under 35 U.S.C. § 112, 2nd paragraph.

Claim 22 recites "wherein the router receives a request from a client data processing system, where the request is then received by a network dispatcher that is interconnected to the router and a plurality of server data processing systems, where the plurality of servers appear to the client as a single server having a single network address". The Examiner notes concerns that 'the plurality of servers' has insufficient antecedent basis.

Per MPEP 2173.05(e), a claim is indefinite when it contains words or phrases whose meaning is unclear. The lack of clarity could arise where a claim refers to "said lever" or "the lever," where the claim contains no earlier recitation or limitation of a lever and where it would be unclear as to what element the limitation was making reference. Similarly, if two different levers are recited earlier in the claim, the recitation of "said lever" in the same or subsequent claim would be unclear where it is uncertain which of the two levers was intended. A claim which refers to "said aluminum lever," but recites only "a lever" earlier in the claim, is indefinite because it is uncertain as to the lever to which reference is made. Obviously, however, the failure to provide explicit antecedent basis for terms does not always render a claim indefinite. If the scope of a claim would be reasonably ascertainable by those skilled in the art, then the claim is not indefinite. *Energizer Holdings Inc. v. Int'l Trade Comm'n, 435 F.3d 1366, 77 USPQ2d 1625 (Fed. Cir. 2006) (holding that "anode gel" provided by implication the antecedent basis for "zinc anode"); Ex parte Porter*, 25 USPQ2d 1144, 1145 (Bd. Pat. App. & Inter. 1992) ("controlled stream of fluid" provided reasonable antecedent basis for "the controlled fluid"). Inherent components of elements recited have antecedent basis in the recitation of the components themselves. For example, the limitation "the outer surface of said sphere" would not require an antecedent recitation that the sphere has an outer surface. See *Bose Corp. v. JBL, Inc.*, 274 F.3d 1354, 1359, 61 USPQ2d 1216, 1218-19 (Fed. Cir 2001) (holding that recitation of "an ellipse" provided antecedent basis for "an ellipse having a major diameter" because "[t]here can be no dispute that mathematically an inherent characteristic of an ellipse is a major diameter").

For Claim 22 (and similarly for Claims 23 and 24), there is no ambiguity created by use of two different phrases for the same thing – "plurality of server data processing systems" and "plurality of servers" as there are no other 'plurality' of things recited in the claim and hence the common usage of 'plurality' as tied to both the 'server data processing systems' and the 'servers' does not create any ambiguity in the claim since 'servers' and 'server data processing systems' are synonymous terms to those of ordinary skill in the art. Thus, it is urged that the rejection of Claim 22 (and similarly for Claims 23 and 24) under 35 U.S.C. § 112, 2nd paragraph is in error as such claim is not indefinite.

B. GROUND OF REJECTION 2 (Claims 18-20)

Claims 18-20 stand rejected under 35 U.S.C. § 101 as being directed towards non-statutory subject matter.

1. *Claims 18-20*

Claim 18 fully complies with the USPTO's guidelines regarding proper statutory subject matter. For example:

> "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)(claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1760 (claim to data structure *per se* held nonstatutory)" (emphasis added by Appellants).

Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility. [1]

Claim 18 recites "A computer readable medium encoded with a computer program product that is operable in a data processing system for monitoring transactions for a set of known nodes in a network data processing system". Appellants urge that a computer readable

[1] http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf

medium encoded with a computer program product that is operable in a data processing system for monitoring transactions for a set of known nodes in a network data processing system is a computer element which defines structural and functional inter-relationships between the computer program and the rest of the computer which permits the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.[2] Accordingly, as Claim 18 expressly recites a computer readable medium encoded with a computer program product that is operable in a data processing system for monitoring transactions for a set of known nodes in a network data processing system, it is shown that Claim 18 (and similarly for Claims 19 and 20) is directed to statutory subject matter, pursuant to both judicial case law and the USPTO's own MPEP rules. Thus, Claim 18 is statutory under 35 U.S.C. § 101.

Still further, Claim 18 explicitly recites a computer readable medium encoded with a computer program product that is operable in a data processing system for monitoring transactions for a set of known nodes in a network data processing system, which is either a 'manufacture' or a 'composition of matter', both of which are statutorily recognized subject matter[3]. In addition, since Claim 18 explicitly recites a computer readable medium encoded with a computer program product that is operable in a data processing system for monitoring transactions for a set of known nodes in a network data processing system, such claim does *not*

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[2] The USPTO's own guidelines similarly state this type of claim is proper under 35 U.S.C. § 101. For example, as stated in the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility (published in the Official Gazette on November 22, 2005) at ANNEX IV (Computer-Related Nonstatutory Subject Matter) "When functional descriptive material is recorded on some **computer-readable medium** it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory)."

[3] **35 U.S.C. 101 Inventions patentable.**
Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

fall within one of the three judicially determined exceptions of: natural phenomenon, law of nature or abstract idea (see, e.g., MPEP 2106 and in particular MPEP 2106(IV)(B) and (C)), but instead is limited to a practical application in the technological arts[4]. Thus, it is further shown that Claim 18 is allowable in view of 35 U.S.C. § 101 as the invention recited therein does not fall within a judicial exception but instead is limited to a practical application in the technological arts.

It is further urged that Claim 18 is very different from the type of claim rejected under 35 U.S.C. § 101 in *In re Nuijten*, 84 USPQ2d 1495, in that such Nuijten claim was specifically directed to operations (watermarking) performed on a data signal itself ("A method of embedding supplemental data in a signal...encoding the signal...modifying selected samples of the encoded signal"). As described above, Claim 18 is not directed to operations being performed on a signal itself, and thus the holding in *In re Nuijten, Id.* is not applicable to Claim 18. For example, this same Nuijten patent application had a program product claim (Claim 15) that was not the subject of appeal, *and this program product claim was allowed, In re Nuijten, Id.*

C. GROUND OF REJECTION 3 (Claims 1-4, 7, 8, 10-14 and 21-24)

Claims 1-4, 7, 8, 10-14 and 21-24 stand rejected under 35 U.S.C. § 103 as being unpatentable over Ogielski et al. (U.S. Publication No. 2004/0221296), hereinafter "Ogielski" and further in view of Guha (U.S. Publication No. 2002/0194324), hereinafter "Guha".

1. *Claim 1, 3, 4, 10, 11, 13 and 14*

(A) The first issue is whether the Examiner has properly established a prima facie showing of obviousness regarding the 'responsive to' aspect of the claimed load balancing. Because one reference is alleged to describe the analyzing of the identified transactions, and a separate and unrelated reference is alleged to describe initiating of load balancing, the initiation of load balance cannot be done *in response to* analyzing the identified transactions because such step is taught in a different reference.

Specifically with respect to Claim 1, such claim recites "analyzing the identified

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[4] *Only when* the claim is devoid of any limitation to a practical application in the technological arts should it be rejected under 35 U.S.C. § 101. Compare *Musgrave*, 431 F.2d at 893, 167 USPQ at 289; *In*

transactions; and *in response to the analyzing the identified transactions*, selectively initiating a load balancing process for at least one of the nodes in the set of known nodes to mitigate transaction overload at the at least one of the nodes" (emphasis added). As can be seen, the selective initiation of the load balancing process is done in response to analyzing the identified transactions.

In rejecting Claim 1, the Examiner alleges Ogielski teaches analyzing identified transactions at paragraph 0014, and in a phone conference (on December 16, 2008) the Examiner clarified that Guha was being applied as teaching a load balancing process at paragraph 0018 and Figures 6 and 9. Appellants urge that because one reference is alleged to describe the analyzing of the identified transactions, and a separate and unrelated reference is alleged to describe initiating of load balancing, the initiation of load balance cannot be done *in response to* analyzing the identified transactions because such analyzing step is taught in a different reference.

This distinction can also be seen by the fact that the Guha reference, which is alleged to teach the claimed load balancing process, performs such load balancing *in response to receiving a request for data* (Guha paragraphs 0067-0069), and not in response to analyzing transactions handled by each node using node identifications, as claimed. Thus, it is urged that Claim 1 has been erroneously rejected as a proper prima facie showing of obviousness has not been established by the Examiner. [5]

(B) Perhaps a more fundamental prima facie obviousness issue pertains to whether any of the cited references describe use of router cache data that includes an *identification of a set of known nodes* sending data packets for transactions. The Ogielski passage that is alleged to teach

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re Foster, 438 F.2d 1011, 1013, 169 USPQ 99, 101 (CCPA 1971).

[5] In rejecting claims under 35 U.S.C. Section 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). Only if that burden is met, does the burden of coming forward with evidence or argument shift to the applicant. *Id.* All words in a claim must be considered in judging the patentability of that claim against the prior art." MPEP 2143.03; *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). **If the examiner fails to establish a prima facie case, the rejection is improper and will be overturned.** *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In the absence of a proper *prima facie* case of obviousness, an applicant who complies with the other statutory requirements is entitled to a patent. *See In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

such identification merely states that routing messages/data are collected to obtain routing patterns. However, this reference does not describe nodes sending data packets for transactions onto a network, or the *identification of such nodes*.

Specifically, Claim 1 recites "receiving cache data from a router in the data processing system, wherein the cache data includes an identification of the set of known nodes sending data packets for transactions onto the network data processing system". As can be seen, router cache data is received, and such router cache data includes an *identification of nodes* sending data packets for transactions.

In rejecting this aspect of Claim 1, the Examiner states that Ogielski teaches such cache data at paragraph 0014 since there Ogielski describes collecting routing messages/data and obtaining routing patterns. Appellants urge that such assertion does not establish any teaching/suggestion of receiving *cache* data from a router – instead such passage merely describes collecting 'routing message data' from a router. Still further, this 'message routing data' that is collected is not described as including any type of node identification information, whereas per Claim 1 the cache data *that is received* includes node identification information. In contrast, Ogielski performs *subsequent processing steps on the collected data* (correlating and analyzing per paragraph 0014) in order to calculate routing patterns. There is no teaching that received data includes node identification information, as claimed. Thus, it is further urged that Claim 1 has been erroneously rejected due to this additional prima facie obviousness deficiency.

(C) Another issue regarding the deficient prima facie obviousness showing is that while Guha describes load balancing, such load balancing is performed on I/O loads at storage centers, and not on nodes that are identified using cache data received from a router.

Specifically with respect to Claim 1, such claim recites "identifying the transactions handled by each node in the set of known nodes using the identification of the set of nodes included in the cache data received from the router, to form identified transactions" and "selectively initiating a load balancing process for *at least one of the nodes in the set of known nodes* to mitigate transaction overload at the at least one of the nodes" (emphasis added). As can be seen, transaction overload is mitigated by performing load balancing on at least one of the nodes that have been identified using the cache data received from the router.

In rejecting this aspect of Claim 1, the Examiner cites Guha's teaching at paragraph 0018 and Figures 6 and 9. Appellants urge that Guha paragraph 0018 merely states that 'content storage' and 'I/O loads' of storage centers may be dynamically balanced. It is urged that balancing of 'storage' and 'I/O loads' does not teach or suggest load balancing with respect to 'nodes' identified in cache data received from a router, as claimed. Instead, an incoming 'request' for data/content is selectively routed to a given system to meet load balancing constraints (Guha paragraphs 0067-0068). Thus, it is further urged that Claim 1 has been erroneously rejected due to this additional prima facie obviousness deficiency.

2. ***Claims 2, 12 and 19***

Appellants initially urge error in the rejection of Claim 2 (and similarly for Claims 12 and 19) for similar reasons to those given above with respect to independent Claim 1 (of which Claim 2 depends upon).

Further with respect to Claim 2, such claim recites "wherein the cache data is from an address resolution protocol cache located on the router". As can be seen, this aspect of Claim 2 is directed to where the received cache data came from, and in particular such received cache data is from an address resolution protocol cache located on a router.

In rejecting Claim 2, the Examiner alleges that such address resolution protocol cache is described by Ogielski's paragraph 0014 since there it describes 'routing messages/data'. It is urged that 'routing messages/data' does not teach or suggest any type of address resolution protocol cache located on the router, as claimed. Thus, it is further urged that Claim 2 (and similarly for Claims 12 and 19) has been erroneously rejected due to this additional prima facie obviousness deficiency.

3. ***Claim 7***

Appellants initially urge error in the rejection of Claim 7 for similar reasons to those given above with respect to independent Claim 1 (of which Claim 7 ultimately depends upon).

Further with respect to Claim 7, it is urged that the filing date of the cited Ogielski reference does not predate the filing date of the present application. While this reference does claim the benefit of an earlier provisional application filing date that does predate the filing date of the

present application, the teachings are not co-extensive with one another, and certain cited Ogielski passages that are cited in the rejection of Claim 7 does not exist in the provisional application.

Specifically with respect to Claim 7, such claim recites "generating a display of the set of known nodes in a graphical view, wherein the graphical view includes the communications paths with a graphical indication of the network traffic". As can be seen, the features of Claim 7 are directed to the display of the set of known nodes in a graphical view that includes the communication paths with a graphical indication of the network traffic.

In rejecting Claim 7, the Examiner cites Ogielski's Figure 3 as teaching all aspects of Claim 7. It is urged that the filing date of Ogielski is March 18, 2004, which does *not* predate the filing of the present application, which is January 8, 2004. Thus, this Ogielski reference is not a valid 35 U.S.C. § 103 reference with respect to Claim 7.

While the cited Ogielski reference cites a related provisional application filed on March 18, 2003 (provisional application No. 60/455,722), this provisional application does not have a Figure 3 that corresponds to Ogielski's Figure 3 (instead, Figure 3 in the provisional application depicts an aggregate prefix alarm). Since this Ogielski Figure 3 is the sole citation made in rejecting Claim 7, and a corresponding Figure 3 is not included in the provisional application, Ogielski's Figure 3 is not entitled to the effective filing date of the provisional application, but instead is entitled to the effective filing date of Ogielski itself, which is March 18, 2004. Because March 18, 2004 does not predate the filing date of the present application (which is January 8, 2004), Ogielski's Figure 3 is not a proper reference in rejecting Claim 7 as its effective date does not predate the filing date of the present application.

4. ***Claim 8***

Appellants initially urge error in the rejection of Claim 8 for similar reasons to those given above with respect to dependent Claim 2 (of which Claim 8 depends upon).

Further with respect to Claim 8, such claim recites "wherein the cache data is received through an agent located on the router". In rejecting Claim 8, the Examiner alleges that Ogielski's Abstract and paragraph 14 teach such router agent since Ogielski teaches collecting routing data from a plurality of routers. However, such assertion does not establish a teaching/suggestion that cache data is received through an agent located on the router, as claimed. Instead, such assertion

merely establishes an alleged teaching of collecting routing data (which is not cache data, as claimed) from a router (which is not receiving cache data through an agent located on the router, as claimed). Thus, it is further urged that Claim 8 has been erroneously rejected due to this additional prima facie obviousness deficiency.

5. *Claim 21*

Appellants initially urge error in the rejection of Claim 21 for similar reasons to those given above with respect to dependent Claim 8 (of which Claim 21 depends upon).

Further with respect to Claim 21, such claim recites "where the agent clears the address resolution protocol cache each time the cache data is sent to the data processing system". As can be seen, the features of Claim 21 are directed to a cache clearing feature, where the agent of Claim 2 clears that cache each time the cache data is sent to the data processing system.

In rejecting Claim 21, the Examiner alleges Ogielski teaches all aspects of Claim 21 since it teaches 'streaming' of network data in real time in the Abstract and paragraph 0014. Appellants urge that a 'streaming' of data 'over a network' does not teach or suggest any type of cache operations such as clearing a cache, as claimed. Thus, this streaming of data over a network, as per Ogielski, does not teach or suggest "where the agent clears the address resolution protocol cache each time the cache data is sent to the data processing system", as claimed. Thus, it is further urged that Claim 21 has been erroneously rejected due to this additional prima facie obviousness deficiency.

6. *Claim 22*

Appellants initially urge error in the rejection of Claim 22 for similar reasons to those given above with respect to independent Claim 1 (of which Claim 22 depends upon).

Further with respect to Claim 22, such claim recites "wherein the router receives a request from a client data processing system, where the request is then received by a network dispatcher that is interconnected to the router and a plurality of server data processing systems, where the plurality of servers appear to the client as a single server having a single network address". As can be seen, the features of Claim 22 are directed to the architectural arrangement of the system, where the plurality of servers appear to the client as a single server having a single network address.

In rejecting Claim 22, the Examiner alleges that Guha teaches all of the features of Claim 22 since Guha describes in the Abstract, paragraphs 0008-0009 and Figures 6, 7, and 9 the existence of 'clustered servers'. It is urged that a description of 'clustered servers' does not teach/suggest a network dispatcher that is interconnected to a router and a plurality of server data processing systems, or that a plurality of servers appear to a client as a single server having a single network address, as claimed. Thus, it is further urged that Claim 22 has been erroneously rejected due to this additional prima facie obviousness deficiency.

7. *Claim 23*

Appellants initially urge error in the rejection of Claim 23 for similar reasons to those given above with respect to independent Claim 11 (of which Claim 23 depends upon).

Appellants further urge error in the rejection of Claim 23 as the Examiner has provided no reasoning why the rejection of such claim is obvious, or why a person of ordinary skill in the art would have been motivated to combine references together to arrive at the invention recited in Claim 23. Thus, it is further urged that Claim 23 has been erroneously rejected due to this additional prima facie obviousness deficiency.

8. *Claim 24*

Appellants initially urge error in the rejection of Claim 24 as such claim depends upon Claim 18 which is not rejected under 35 U.S.C. § 103. [6]

Appellants further urge error in the rejection of Claim 24 as the Examiner has provided no reasoning why the rejection of such claim is obvious, or why a person of ordinary skill in the art would have been motivated to combine references together to arrive at the invention recited in Claim 24. Thus, it is further urged that Claim 24 has been erroneously rejected due to this additional prima facie obviousness deficiency.

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[6] MPEP 2143.03: If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

D. UNREJECTED CLAIM

It is noted that Claim 17 is not rejected at all in the Final Office Action dated November 14, 2008, and thus is allowable. [7]

It is further noted that Claim 17 is non-obvious for similar reasons to those given above with respect to Claim 7.

E. CONCLUSION

As shown above, the Examiner has failed to state valid rejections against any of the claims. Therefore, Appellants request that the Board of Patent Appeals and Interferences reverse the rejections. Additionally, Appellants request that the Board direct the Examiner to allow the claims.

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Respectfully submitted,

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[7] MPEP 706.07(b): In making such final rejection, **the examiner shall repeat or state all grounds of rejection then considered applicable to the claims in the application**, clearly stating the reasons in support thereof.

CLAIMS APPENDIX

The text of the claims involved in the appeal is as follows:

1. A method in a data processing system for monitoring transactions for a set of known nodes in a network data processing system, the method comprising:

receiving cache data from a router in the data processing system, wherein the cache data includes an identification of the set of known nodes sending data packets for transactions onto the network data processing system;

identifying the transactions handled by each node in the set of known nodes using the identification of the set of nodes included in the cache data received from the router, to form identified transactions;

analyzing the identified transactions; and

in response to the analyzing the identified transactions, selectively initiating a load balancing process for at least one of the nodes in the set of known nodes to mitigate transaction overload at the at least one of the nodes.

2. The method of claim 1, wherein the cache data is from an address resolution protocol cache located on the router.

3. The method of claim 1 further comprising:

receiving cache data from other routers on the network data processing system.

4. The method of claim 1, wherein the receiving step occurs on a periodic basis.

7. The method of claim 4 further comprising:

generating a display of the set of known nodes in a graphical view, wherein the graphical view includes the communications paths with a graphical indication of the network traffic.

8. The method of claim 2, wherein the cache data is received through an agent located on the router.

10. A data processing system for monitoring transactions for a set of known nodes in a network data processing system, the data processing system comprising:

a bus system;

a communications unit connected to the bus system;

a memory connected to the bus system, wherein the memory includes a set of instructions; and

a processing unit connected to the bus system, in which the processing unit executes the set of instructions to receive cache data from a router in the data processing system, in which the cache data includes an identification of the set of known nodes sending data packets for transactions onto the network data processing system, identifies the transactions handled by each node in the set of known nodes using the identification of the set of nodes included in the cache data received from the router, to form identified transactions; analyzes the identified transactions; and in response to the analyzing the identified transactions, selectively initiates a load balancing

process for at least one of the nodes in the set of known nodes to mitigate transaction overload at the at least one of the nodes.

11. A data processing system, including a system bus, for monitoring transactions for a set of known nodes in a network data processing system, the data processing system comprising:

a data processor coupled to the system bus;

receiving means for receiving cache data from a router in the data processing system, wherein the cache data includes an identification of the set of known nodes sending data packets for transactions onto the network data processing system;

identifying means for identifying the transactions handled by each node in the set of known nodes using the identification of the set of nodes included in the cache data received from the router, to form identified transactions;

analyzing means for analyzing the identified transactions; and

initiating means for selectively initiating, responsive to the analyzing means for analyzing the identified transactions, a load balancing process for at least one of the nodes in the set of known nodes to mitigate transaction overload at the at least one of the nodes.

12. The data processing system of claim 11, wherein the cache data is from an address resolution protocol cache located on the router.

13. The data processing system of claim 11 wherein the receiving means is a first receiving means and further comprising:

second receiving means for receiving cache data from other routers on the network data processing system.

14. The data processing system of claim 11, wherein the receiving means is initiated on a periodic basis.

17. The data processing system of claim 14 further comprising:

generating means for generating a display of the set of known nodes in a graphical view, wherein the graphical view includes the communications paths with a graphical indication of the network traffic.

18. A computer readable medium encoded with a computer program product that is operable in a data processing system for monitoring transactions for a set of known nodes in a network data processing system, the computer program product comprising:

first instructions for receiving cache data from a router in the data processing system, wherein the cache data includes an identification of the set of known nodes sending data packets for transactions onto the network data processing system;

second instructions for identifying the transactions handled by each node in the set of known nodes using the identification of the set of nodes included in the cache data received from the router, to form identified transactions;

third instructions for analyzing the identified transactions; and

fourth instructions for selectively initiating, in response to the third instructions for analyzing the identified transactions, a load balancing process for at least one of the nodes in the set of known nodes to mitigate transaction overload at the at least one of the nodes.

19. The computer program product of claim 18, wherein the cache data is from an address resolution protocol cache located on the router.

20. The computer program product of claim 18 further comprising:

fifth instructions for receiving cache data from other routers on the network data processing system.

21. The method of claim 8, where the agent clears the address resolution protocol cache each time the cache data is sent to the data processing system.

22. The method of claim 1, wherein the router receives a request from a client data processing system, where the request is then received by a network dispatcher that is interconnected to the router and a plurality of server data processing systems, where the plurality of servers appear to the client as a single server having a single network address.

23. The data processing system of claim 11, wherein the router receives a request from a client data processing system, where the request is then received by a network dispatcher that is interconnected to the router and a plurality of server data processing systems, where the plurality of servers appear to the client as a single server having a single network address.

24. The computer program product of claim 18, wherein the router receives a request from a client data processing system, where the request is then received by a network dispatcher that is interconnected to the router and a plurality of server data processing systems, where the plurality of servers appear to the client as a single server having a single network address.

EVIDENCE APPENDIX

This appeal brief presents no additional evidence.

RELATED PROCEEDINGS APPENDIX

This appeal has no related proceedings.